Your Big Data Action Plan

By Bruno Lanvin, Executive Director of the INSEAD European Competitiveness Initiative and Executive Director for Global Indices and Beñat Bilbao-Osorio, Snr. Economist, Global Competitiveness & Benchmarking Network, World Economic Forum with INSEAD Knowledge

With the magnitude of data available and our growing capability to process it, big data has become an asset class that has spawned an entire industry. How should you be positioned to take advantage of it?

Today, we are seeing a data explosion rivaling the Texas oil boom of the 20th century and the San Francisco gold rush of the 1800s, according to the authors of the **Global Information Technology Report (GITR) 2014**. With the magnitude of information available today and our capability to process it, big data has become an asset class in its own right.

But, as in the time of the gold rush, prospectors will need the tools, technology and a support industry at hand to pull this 21st century treasure out of the mountains of unstructured information that has built up over decades.

"It is important that organisations, both public and private, can obtain value out of this big data. For that, they will have to identify what type of data they

want to focus on, analyse it, develop the right set of analytics that can make sense of it and, importantly, create the right set of organisational structures and develop the set of skills that can actually make sense of this big data," said Beñat Bilbao-Osorio, Senior Economist of the Global Competitiveness and Benchmarking Network at the World Economic Forum.

Melting it down

Financial transactions, internet search habits, social media posts and every imaginable human interaction can be captured and studied within the realm of big data.

There is no doubt that big data is changing our lives and it's changing the way we do business. IBM uses data to optimise traffic flow in the city of Stockholm and to get the best air quality; Google uses big data to predict the next wave of influenza based on location information from searches for doctors and medication; the National Centre for Academic Transformation is data mining to identify which college students are more likely to succeed in which courses.

It's estimated that big data holds the ability to yield US$19 trillion in value over the next decade. While accessing the information is relatively easy, getting real value out of it requires companies to identify patterns from which predictions can be inferred and decisions made. Organisations will have to decide what is valuable and what isn't, what insights they want to receive and how it can shape their strategies.

The organisational big data action plan

All of this will need planning and the right conditions for the industry to flourish. According to the GITR, the most prominent obstacle is the shortage of available talent specialising in data analytics. Many businesses also suffer from the fragmentation of data across various silos. This has to be made consistent and shared across the organisation.

There are also external challenges to the widespread adoption of big data analytics. Privacy concerns are creating public unease as individuals' lifestyle preferences and buying habits are collected and analysed without the explicit consent of the customer being studied. In this area, tighter regulatory control is likely.

"The policy dimension, where issues such as data privacy and internet governance come into play, will be actively discussed in the coming months, and will determine to a large extent how the world as a whole will be able to take advantage of the IT revolution and the globalisation of the Internet," said Bruno Lanvin, Executive Director of INSEAD's European Competitiveness Initiative.

The GITR recommends that policy makers should:

- Formulate a vision for the use of data consistent with the public interest, fostering a common understanding with citizens and obtaining their buy-in
- Enable a big data ecosystem by establishing policies to facilitate valid business models for third party data, service and information technology system providers
- Speed and scale up the education of talent to address the likely significant shortage of talent with the requisite skills to leverage and handle big data

While the report says there is no general rule for how executives should navigate big data to reach maturity, there are some general priorities to follow.

- Develop a clear big data strategy
- Prove the value of data in pilot schemes
- Identify the owner of big data within the organisation and formally establish a "Chief Data Scientist"
- Recruit and train talent to ask the right questions and technical personnel to provide the systems and tools to allow executives to ask those questions
- Position big data as an integral part of the operating model
- Establish a data-driven decision culture and launch a communication campaign around it

Both business and policy makers still have much to do to realise the full potential of big data. The GITR predicts that within the next five years, big data will become the norm, enabling a new horizon of personalisation for both products and services. McKinsey believes that the mass of information collected globally will grow from some 2,700 exabytes in 2012 to 40,000 exabytes by 2020. To put this into context, a single exabyte of data equals a hundred thousand times all the printed material of the Library of Congress.

Companies that can use information effectively find themselves more competitive than peers and achieve better sales and profits as a result. Is your big data action plan ready?

*For more about the main findings and the rankings in this year's **Global Information Technology Report 2014**, read **The World's Most Tech-Ready Countries 2014***

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